

City of Warwick Retiree Health Care Plan

Actuarial Valuation Report as of June 30, 2022

GASB Statements No. 74 and No. 75, Accounting and Financial
Reporting for Postemployment Benefits Other Than Pensions
for Fiscal Year Ending June 30, 2022





March 6, 2023

Mr. Peder Schaefer
Finance Director
City of Warwick
3275 Post Road
Warwick, RI, 02886

Dear Mr. Schaefer:

This report provides information on behalf of the City of Warwick Retiree Health Care Plan in connection with the Governmental Accounting Standards Board (GASB) Statements No. 74 and No. 75. GASB Statement No. 74 is the accounting standard, which applies to other postemployment benefits (OPEB) plans that are administered through trusts or equivalent arrangements. GASB Statement No. 75 establishes accounting and financial reporting requirements for state and local government employers that provide their employees with postemployment benefits other than pensions.

The calculation of the liability associated with the benefits described in this report was performed for the purpose of satisfying the requirements of GASB Statements No. 74 and No. 75. The calculation of the plan's liability for this report is not applicable for funding purposes of the plan. A calculation of the plan's liability for purposes other than satisfying the requirements of GASB Statements No. 74 and No. 75 may produce significantly different results. This report may be provided to parties other than City of Warwick only in its entirety and only with the permission of the City. GRS is not responsible for unauthorized use of this report.

This report is based upon information, furnished to us by the City, concerning other postemployment benefits (OPEB), active members, deferred vested members, retirees and beneficiaries, and financial data. This information was checked for internal consistency, but it was not audited.

Based on the available data, the information contained in this report is accurate and fairly represents the actuarial position of the City of Warwick Retiree Health Care Plan as of the reporting date. All calculations have been made in conformity with generally accepted actuarial principles and practices as well as the Actuarial Standards of Practice. The assumptions used for the measurements are reasonable and appropriate for the purposes for which they have been used. If you have reason to believe that the information provided in this report is inaccurate, or is in any way incomplete, or if you need further information in order to make an informed decision on the subject matter of this report, please contact the author of the report prior to making such decision.

This report was prepared using our proprietary valuation model and related software which in our professional judgment has the capability to provide results that are consistent with the purposes of the valuation and has no material limitations or known weaknesses. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

Mr. Peder Schaefer

March 6, 2023

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Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements; and changes in plan provisions or applicable law.

The signing individuals are independent of the plan sponsor.

Mr. Newton and Mr. Orth are members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Respectfully submitted,
Gabriel, Roeder, Smith & Company



Joseph P. Newton, FSA, FCA, EA, MAAA



Blake Orth, FSA, EA, MAAA



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SECTION A

EXECUTIVE SUMMARY

Auditor's Note – This information is intended to assist in preparation of the financial statements of the City of Warwick Retiree Health Care Plan. Financial statements are the responsibility of management, subject to the auditor's review. Please let us know if the auditor recommends any changes.

Executive Summary

Actuarial Valuation Date	June 30, 2022
Measurement Date of the Net OPEB Liability	June 30, 2022
Employer's Fiscal Year Ending Date	June 30, 2022

Membership

Number of	
- Retirees and Beneficiaries	813
- Inactive, Nonretired Members	0
- Active Members	705
- Total	1,518
Covered Payroll	\$ 50,771,462

Net OPEB Liability

Total OPEB Liability	\$ 397,385,397
Plan Fiduciary Net Position	222,837
Net OPEB Liability	\$ 397,162,560
Plan Fiduciary Net Position as a Percentage of Total OPEB Liability	0.06 %
Net OPEB Liability as a Percentage of Covered Payroll	782.26 %

Development of the Single Discount Rate

Single Discount Rate	3.69 %
Long-Term Expected Rate of Investment Return	6.00 %
Long-Term Municipal Bond Rate*	3.69 %

Total OPEB Expense	\$ 27,518,111
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Balances of Deferred Outflows and Deferred Inflows of Resources Related to OPEB

	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience, liability	\$ 78,254,604	\$ 8,338,445
Changes in assumptions	17,009,748	93,783,433
Difference between expected and actual experience, assets	27,730	0
Total	\$ 95,292,082	\$ 102,121,878

* Source: Fixed-income municipal bonds with 20 years to maturity that include only federally tax-exempt municipal bonds as reported in the Fidelity "20-Year Municipal GO AA Index" as of June 30, 2022.



Discussion

Accounting Standard

For post-employment (OPEB) benefit plans that are administered through trusts or equivalent arrangements, Governmental Accounting Standards Board (GASB) Statement No. 74, “Financial Reporting for Postemployment Benefit Plans other than Pension Plans,” replaces the requirements of GASB Statement No. 43, “Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans.” Similarly, GASB Statement No. 75 establishes standards for state and local government employers (as well as non-employer contributing entities) to account for and disclose net OPEB liability, OPEB expense, and other information associated with providing OPEB to their employees (and former employees) on their financial statements.

GASB Statements No. 74 and No. 75 are effective for fiscal years beginning after June 15, 2016 and June 15, 2017, respectively.

The following discussion provides a summary of the information that is required to be disclosed under these accounting standards. A number of these disclosure items are provided in this report. However, certain information, such as notes regarding accounting policies and investments, is not included in this report. As a result, the plan sponsor will be responsible for preparing and disclosing the non-actuarial information needed to comply with these accounting standards.

Financial Statements

For plans that have formal trusts, GASB Statement No. 75 requires state and local government employers to recognize the net OPEB liability and the OPEB expense on their financial statements, along with the related deferred outflows and inflows of resources. The net OPEB liability is the difference between the total OPEB liability and the plan’s fiduciary net position. In traditional actuarial terms, the net OPEB liability is analogous to the actuarial accrued liability less the market value of assets.

GASB Statement No. 75 states the employer contributions made to the OPEB plan subsequent to the measurement date and before the end of the employer’s reporting period should be reported as a deferred outflow of resources.

The OPEB expense recognized each fiscal year is equal to the change in the net OPEB liability from the beginning of the year to the end of the year, adjusted for deferred recognition of the liability and investment experience.

GASB Statement No. 74 requires defined benefit OPEB plans which are administered as trusts or equivalent arrangements to present two financial statements: a statement of fiduciary net position and a statement of changes in fiduciary net position. The statement of fiduciary net position presents the assets and liabilities of the OPEB plan at the end of the OPEB plan’s reporting period. The statement of changes in fiduciary net position presents the additions, such as contributions and investment income, and deductions, such as benefit payments and expense, and net increase or decrease in the fiduciary net position.

Notes to Financial Statements

GASB Statement No. 75 requires the notes of the employer's financial statements to disclose the total OPEB expense, the OPEB plan's liabilities and assets, and deferred outflows of resources and inflows of resources related to OPEB.

GASB Statements No. 74 and No. 75 require the notes of the financial statements for employers and OPEB plans to include certain additional information. The list of disclosure items should include:

- The name of the OPEB plan, the administrator of the OPEB plan, and the identification of whether the OPEB plan is a single-employer, agent, or cost-sharing OPEB plan;
- A description of the benefits provided by the plan;
- A brief description of changes in benefit terms or assumptions that affected the measurement of the total OPEB liability since the prior measurement date;
- The number of plan members by category and if the plan is closed;
- A description of the plan's funding policy, which includes member and employer contribution requirements;
- The OPEB plan's investment policies;
- The OPEB plan's fiduciary net position and the net OPEB liability;
- The net OPEB liability using +/- 1% on the discount rate;
- The net OPEB liability using +/- 1% on the healthcare trend rate;
- Significant assumptions and methods used to calculate the total OPEB liability;
- Inputs to the discount rates; and
- Certain information about mortality assumptions and the dates of experience studies.

OPEB plans that are administered through trusts or equivalent arrangements are required to disclose additional information in accordance with GASB Statement No. 74. This information includes:

- The composition of the OPEB plan's Board and the authority under which benefit terms may be amended;
- A description of how fair value is determined;
- Information regarding certain reserves and investments, which include concentrations of investments greater than or equal to 5%, receivables, and insurance contracts excluded from plan assets; and
- Annual money-weighted rate of return.

Required Supplementary Information

GASB Statement No. 74 requires a 10-year fiscal history of:

- Sources of changes in the net OPEB liability.
- Information about the components of the net OPEB liability and related ratios, including the OPEB plan's fiduciary net position as a percentage of the total OPEB liability and the net OPEB liability as a percent of covered-employee payroll.
- Comparison of the actual employer contributions to the actuarially determined contributions based on the plan's funding policy.
- For plans with an actuarially determined contribution, the schedule covering each of the 10 most recent fiscal years of the actuarially determined contribution, contributions to the OPEB plan and related ratios.

Implicit Subsidy

GASB Statements No. 75 and No. 68 are conceptually very similar in terms of the liability which is recognized on the balance sheet, the expense calculation, and the corresponding deferred outflows and inflows of resources. The main differences between the standards are related to the differences between pension and health care benefits. One particular difference is a concept referred to as the “implicit subsidy”, which applies to health plans that utilize blended premiums, that has no counterpart in GASB Statement No. 68. The City’s health plan utilizes a “blended premium” structure. Said another way, the overall health care premiums for active employees and non-Medicare are stated in terms of a single “blended premium”. The difference between the underlying retiree claims and the blended overall health care premium is referred to as an “implicit” or “hidden” subsidy. Because the underlying claims costs for a non-Medicare retiree are on average higher than the blended premium, there is a positive implicit subsidy for the non-Medicare retirees.

GASB defines the employer provided OPEB benefit as the difference between the underlying claims costs and the premium contributions made by retirees. As a result, the employer’s portion of the blended health care premium is not what GASB considers the employer benefit. In order to account for the employer provided OPEB benefit, as it’s defined by GASB, the explicit premium subsidies need to be adjusted to reflect the implicit subsidy (the difference between the estimated retiree claims and the overall premiums).

For plans that use a blended premium structure, Illustrations B1-1 and B1-2 of Implementation Guide No. 2017-3 describe how a portion of the payments made on behalf of the active employees should be reclassified as benefit payments for retiree health care to reflect the retirees’ underlying claims costs. Adjusting the explicit health care costs for active employees and retirees by the implicit subsidy estimates provided in this report is equivalent to the reclassification described in the Implementation Guide. **It’s important to note that the implicit subsidy is considered an employer contribution and any employer contributions related to OPEB need to include the implicit subsidy.**

To summarize, because the health plan utilizes blended premiums, the benefit payments for GASB Statement No. 75 purposes need to include an adjustment for the implicit subsidy. This adjustment reflects the underlying cost of the benefits provided to retirees, which is how GASB defines the employer’s OPEB benefit/liability. This adjustment is needed for the benefits during the measurement period and also for the purpose of the deferred outflow related to the benefits paid after the measurement date.

Timing and Frequency of the Actuarial Valuation

An actuarial valuation to determine the total OPEB liability is required to be performed at least every two years. For the employer's financial reporting purposes, the total OPEB liability and OPEB expense should be measured as of the employer's "measurement date" which may not be earlier than the employer's prior fiscal year end-date. If the actuarial valuation used to determine the total OPEB liability is not calculated as of the measurement date, the total OPEB liability is required to be rolled forward from the actuarial valuation date to the measurement date.

The total OPEB liability shown in this report is based on an actuarial valuation performed as of June 30, 2022 and a measurement date of June 30, 2022.

Single Discount Rate

Projected benefit payments are required to be discounted to their actuarial present values using a Single Discount Rate that reflects (1) a long-term expected rate of return on OPEB plan investments (to the extent that the plan's fiduciary net position is projected to be sufficient to pay benefits), and (2) tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating as of the measurement date (to the extent that the contributions for use with the long-term expected rate of return are not met).

For the purpose of this valuation, the expected rate of return on OPEB plan investments is 6.00%; the municipal bond rate is 3.69% (based on the daily rate closest to but not later than the measurement date of the Fidelity "20-Year Municipal GO AA Index"); and the resulting Single Discount Rate is 3.69%.

Actuarial Assumptions

The actuarial assumptions used to value the liabilities are outlined in detail in Section H. The assumptions include details on the health care trend assumption, the aging factors as well as the cost method used to develop the OPEB expense. The demographic assumptions are based on the assumptions that were developed for the defined benefit plans in which the City participates. The demographic assumptions that are specific to OPEB are based on the plan's individual experience and are revisited during each full valuation. The healthcare trend assumption is based on the framework developed in the Society of Actuaries' Getzen Model.

Future Uncertainty or Risk

Future results may differ from those anticipated in this valuation. Reasons include, but are not limited to:

- Actual medical trend differing from expected;
- Changes in the healthcare plan designs offered to active and retired members;
- Participant behavior or experience differing from expected;
 - Elections at retirement;
 - One-person versus two-person coverage elections;
 - Time of retirement or termination;
 - Catastrophic claims.

Benefits Valued

The benefit provisions that were valued are in Section E. The valuation is required to be performed on the current benefit terms and existing legal agreements. Consideration is to be given to the written plan document as well as other communications between the employer and plan members and an established pattern of practice for cost sharing. The summary of major plan provisions is designed to outline principal plan benefits. If the plan summary is not in accordance with the actual provisions, please alert the actuaries IMMEDIATELY so they can both be sure the proper provisions are valued.

Effective Date and Transition

GASB Statements No. 74 and No. 75 are effective for fiscal years beginning after June 15, 2016 and June 15, 2017, respectively.

SECTION B

PLAN FINANCIAL STATEMENTS

Statement of Fiduciary Net Position

	<u>June 30, 2022</u>
Assets	
Investments	
Equities, including index funds	<u>\$ 222,837</u>
Total Investments	<u>\$ 222,837</u>
Total Assets	<u>\$ 222,837</u>
Liabilities	
Total Liabilities	<u>\$ 0</u>
Net Position Restricted for OPEB	<u><u>\$ 222,837</u></u>

Statement of Changes in Fiduciary Net Position

	<u>June 30, 2022</u>
Additions	
Contributions	
Employer	\$ 13,398,953
Total Contributions	<u>\$ 13,398,953</u>
Investment Income	
Net Appreciation in Fair Value of Investments	\$ (27,163)
Net Investment Income	<u>\$ (27,163)</u>
Total Additions	<u>\$ 13,371,790</u>
 Deductions	
Benefit Payments	\$ 13,148,953
OPEB Plan Administrative Expense	<u>0</u>
Total Deductions	<u>\$ 13,148,953</u>
 Net Increase in Net Position	 \$ 222,837
 Net Position Restricted for OPEB	
Beginning of Year	<u>\$ 0</u>
End of Year	<u><u>\$ 222,837</u></u>

Consistent with the requirements of GASB Statements No. 74 and No. 75, employer contributions include “amounts for OPEB as the benefits come due that will not be reimbursed to the employer using OPEB plan assets.” The employer contributions of \$13,398,953 consists of a trust contribution of \$250,000 and benefit payments of \$13,148,953, which were paid by the City using its own assets. Please see page C-1 for the development of the benefit payments amount.

SECTION C

FINANCIAL SCHEDULES

Schedule of Changes in Net OPEB Liability

Fiscal Year Ending June 30, 2022

	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability
Beginning balance	\$ 405,646,666	\$ 0	\$ 405,646,666
Service cost	20,063,473		20,063,473
Interest on the total OPEB liability	8,918,466		8,918,466
Changes of benefit terms	0		0
Difference between expected and actual experience	92,287,051		92,287,051
Changes of assumptions	(116,381,306)		(116,381,306)
Employer contributions		13,398,953	(13,398,953)
Net investment income		(27,163)	27,163
Benefit payments	(13,148,953)	(13,148,953)	0
Administrative expense		0	0
Other		0	0
Net changes	<u>(8,261,269)</u>	<u>222,837</u>	<u>(8,484,106)</u>
Ending balance	<u>\$ 397,385,397</u>	<u>\$ 222,837</u>	<u>\$ 397,162,560</u>

Ending balances are as of the measurement date, June 30, 2022.

Changes of assumptions reflect a change in the Single Discount Rate from 2.18% as of June 30, 2021 to 3.69% as of June 30, 2022.

Consistent with the requirements of GASB Statements No. 74 and No. 75, employer contributions include "amounts for OPEB as the benefits come due that will not be reimbursed to the employer using OPEB plan assets." The employer contributions of \$13,398,953 consists of a trust contribution of \$250,000 and benefit payments of \$13,148,953, which were paid by the City using its own assets.

The benefit payments during the measurement period were determined as follows:

a. Explicit benefit payments	\$ 10,957,461	(data provided by the City)
b. Implicit benefit payments	<u>2,191,492</u>	(explicit benefit payments * 0.200)
c. Total benefit payments	\$ 13,148,953	

The 0.200 factor equals the ratio of the expected implicit subsidy to the expected explicit costs.



Recognition of Deferred Outflows and Deferred Inflows of Resources

Differences between expected and actual experience and changes in assumptions are recognized in OPEB expense using a systematic and rational method over a closed period equal to the average of the expected remaining service lives of all employees that are provided with OPEB through the OPEB plan (active employees and inactive employees) determined as of the beginning of the measurement period.

At the beginning of the current measurement period, the expected remaining service lives of all active employees in the plan was approximately 7,818 years. Additionally, the total plan membership (active employees and inactive employees) was 1,518. As a result, the average of the expected remaining service lives for purposes of recognizing the applicable deferred outflows and inflows of resources established in the current measurement period is 5.1501 years.

Additionally, differences between projected and actual earnings on OPEB plan investments should be recognized in OPEB expense using a systematic and rational method over a closed five-year period. For this purpose, the deferred outflows and inflows of resources are recognized in the OPEB expense as a level dollar amount over the closed period identified above.

Statement of Outflows and Inflows Arising from Current Reporting Period

	Recognition Period (or amortization years)	Total (Inflow) or Outflow	2022 Recognized in current OPEB expense	Deferred (Inflow) or Outflow in future expense
<u>Due to Liabilities:</u>				
Differences in expected and actual experience	5.1501	\$ 92,287,051	\$ 17,919,468	\$ 74,367,583
Assumption changes	5.1501	\$ (116,381,306)	\$ (22,597,873)	\$ (93,783,433)
<u>Due to Assets:</u>				
Excess Investment Returns	5.0000	\$ 34,663	\$ 6,933	\$ 27,730
Total		\$ (24,059,592)	\$ (4,671,472)	\$ (19,388,120)

This table is provided to document sources of the new deferred inflows and outflows resulting from the current reporting year. The table is not a required disclosure. The required disclosures regarding deferred inflows and outflows of resources related to OPEB are shown on page C-4.

Statement of OPEB Expense under GASB Statement No. 75

Fiscal Year Ending June 30, 2022

1. Service Cost	\$ 20,063,473
2. Interest on the Total OPEB Liability	8,918,466
3. Current-Period Benefit Changes	0
4. Employee Contributions (made negative for addition here)	0
5. Projected Earnings on Plan Investments (made negative for addition here)	(7,500)
6. OPEB Plan Administrative Expense	0
7. Other Changes in Plan Fiduciary Net Position	0
8. Recognition of Current Year Outflow/(Inflow) due to Liabilities	(4,678,405)
9. Recognition of Current Year Outflow/(Inflow) due to Assets	6,933
10. Amortization of Prior Year Outflow/(Inflow) due to Liabilities	3,215,144
11. Amortization of Prior Year Outflow/(Inflow) due to Assets	0
12. Total OPEB Expense	\$ 27,518,111

Total OPEB Expense and Total OPEB Liability by Fund

	<u>General</u>	<u>Fire</u>	<u>Police</u>	<u>Total</u>
Total OPEB Expense	5,882,607	12,876,255	8,759,249	27,518,111
Total OPEB Liability	89,309,728	171,383,941	136,691,728	397,385,397

Balances of Deferred Outflows and Deferred Inflows of Resources Related to OPEB

	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience, liability	\$ 78,254,604	\$ 8,338,445
Changes in assumptions	17,009,748	93,783,433
Difference between expected and actual experience, assets	27,730	0
Total	\$ 95,292,082	\$ 102,121,878

Employer contributions made subsequent to the measurement date of the total OPEB liability (June 30, 2022) and prior to the end of the employer's reporting period (June 30, 2022) should be reported by the employer as a deferred outflow related to OPEB. See paragraph 44 of GASB Statement No. 75 for single/agent employers that have formal assets.

Because the measurement date of the total OPEB liability is equal to the last day of the employer's fiscal year, there is no deferred outflow related to contributions made subsequent to the measurement date.

Deferred Outflows and Deferred Inflows to be Recognized in Future OPEB Expense

Year Ending June 30	Net Deferred Outflows (Inflows)
2023	\$ (1,456,328)
2024	(1,456,328)
2025	(1,456,330)
2026	(1,758,580)
2027	(702,230)
Thereafter	0
Total	\$ (6,829,796)

Deferred Outflows and Inflows – Amortization Schedule

		Outflow/(Inflow)	Fiscal Year Ending							Outflow/(Inflow)
Remaining Recognition Period		at beginning of Fiscal Year (or created in current year)	2022	2023	2024	2025	2026	2027	Thereafter	at end of Fiscal Year
Differences in Liability Experience										
2022	5.1501	92,287,051	17,919,468	17,919,468	17,919,468	17,919,468	17,919,468	2,689,711	0	74,367,583
2021	5.0000	(1,607,225)	(321,445)	(321,445)	(321,445)	(321,445)	(321,445)	0	0	(1,285,780)
2020	4.0000	5,182,695	1,295,674	1,295,674	1,295,674	1,295,673	0	0	0	3,887,021
2019	5.0000	(2,201,911)	(440,383)	(440,383)	(440,383)	(440,383)	(440,379)	0	0	(1,761,528)
2018	4.0000	(7,054,849)	(1,763,712)	(1,763,712)	(1,763,712)	(1,763,713)	0	0	0	(5,291,137)
Total			\$ 16,689,602	\$ 16,689,602	\$ 16,689,602	\$ 16,689,600	\$ 17,157,644	\$ 2,689,711	\$ 0	\$ 69,916,159
Assumption Changes										
2022	5.1501	(116,381,306)	(22,597,873)	(22,597,873)	(22,597,873)	(22,597,873)	(22,597,873)	(3,391,941)	0	(93,783,433)
2021	5.0000	14,628,138	2,925,628	2,925,628	2,925,628	2,925,628	2,925,626	0	0	11,702,510
2020	4.0000	3,081,156	770,289	770,289	770,289	770,289	0	0	0	2,310,867
2019	5.0000	3,745,464	749,093	749,093	749,093	749,093	749,092	0	0	2,996,371
2018	4.0000	0	0	0	0	0	0	0	0	0
Total			\$ (18,152,863)	\$ (18,152,863)	\$ (18,152,863)	\$ (18,152,863)	\$ (18,923,155)	\$ (3,391,941)	\$ 0	\$ (76,773,685)
Investment Experience										
2022	5.0000	34,663	6,933	6,933	6,933	6,933	6,931	0	0	27,730
Total			\$ 6,933	\$ 6,933	\$ 6,933	\$ 6,933	\$ 6,931	\$ 0	\$ 0	\$ 27,730
Total Recognized in Future Expense				\$ (1,456,328)	\$ (1,456,328)	\$ (1,456,330)	\$ (1,758,580)	\$ (702,230)	\$ 0	\$ (6,829,796)

This table is provided to document sources of the outstanding deferred inflows and outflows from year to year. The table is not a required disclosure. The required disclosures regarding deferred inflows and outflows of resources related to OPEB are shown on the previous page.

Actuarial Assumptions and Methods

Valuation Date: June 30, 2022

Methods and Assumptions:

Actuarial Cost Method	Individual Entry-Age Normal
Single Discount Rate	3.69% as of June 30, 2022
Inflation	2.50%
Salary Increases	General: 0.00% to 4.00%, not including wage inflation of 3.00% Fire: 0.00% to 10.00%, not including wage inflation of 3.50% Police: 0.00% to 10.00%, not including wage inflation of 3.50%
Demographic Assumptions	Based on the pension valuations as of July 1, 2022, as conducted for the City of Warwick.
Mortality	For healthy retirees, the gender-distinct PubG-2010 Healthy Retiree tables by Occupation were used, with male rates multiplied by 115% and female rates multiplied by 111%. Those rates were projected on a fully generational basis using the ultimate mortality improvement rates from the MP-2016 table.
Healthcare Cost Trend Rates	Pre-65: Initial rate of 6.75% declining to an ultimate rate of 4.15% after 12 years. Post-65: Initial rate of 5.20% declining to an ultimate rate of 4.15% after 11 years.
Participation Rates	100% for pre-65 and post-65 coverage; 100% for part B reimbursements (fire retirees only); 100% for dental (police retirees only)

Other Information:

Notes The Single Discount Rate changed from 2.18% as of June 30, 2021 to 3.69% as of June 30, 2022.

Single Discount Rate

Projected benefit payments are required to be discounted to their actuarial present values using a Single Discount Rate that reflects (1) a long-term expected rate of return on OPEB plan investments (to the extent that the plan’s fiduciary net position is projected to be sufficient to pay benefits), and (2) tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating as of the measurement date (to the extent that the contributions for use with the long-term expected rate of return are not met).

For the purpose of this valuation, the expected rate of return on OPEB plan investments is 6.00%; the municipal bond rate is 3.69% (based on the daily rate closest to but not later than the measurement date of the Fidelity “20-Year Municipal GO AA Index”); and the resulting Single Discount Rate is 3.69%.

Summary of Membership Information

The following table provides a summary of the number of participants in the plan as of June 30, 2022:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	813
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	0
Active Plan Members	705
Total Plan Members	1,518

Sample Disclosures and Required Supplementary Information (RSI)

Illustration 1 in Appendix C of GASB Statement No. 75 provides sample note disclosures and required supplementary information (RSI) for a single employer plan that is administered through a formal trust.

Sensitivity of Net OPEB Liability to the Single Discount Rate Assumption

Regarding the sensitivity of the net OPEB liability to changes in the Single Discount Rate, the following presents the plan's net OPEB liability, calculated using a Single Discount Rate of 3.69%, as well as what the plan's net OPEB liability would be if it were calculated using a Single Discount Rate that is one percent lower or one percent higher:

1% Decrease	Current Single Discount	1% Increase
2.69%	Rate Assumption	4.69%
\$ 468,966,511	\$ 397,162,560	\$ 341,212,944

Sensitivity of Net OPEB Liability to the Healthcare Cost Trend Rate Assumption

Regarding the sensitivity of the net OPEB liability to changes in the healthcare cost trend rates, the following presents the plan's net OPEB liability, calculated using the assumed trend rates as well as what the plan's net OPEB liability would be if it were calculated using a trend rate that is one percent lower or one percent higher:

1% Decrease	Current Healthcare Cost	1% Increase
	Trend Rate Assumption	
\$ 336,133,453	\$ 397,162,560	\$ 476,799,607

SECTION D

REQUIRED SUPPLEMENTARY INFORMATION

Schedule of Changes in Net OPEB Liability and Related Ratios

Last 10 Fiscal Years (which may be built prospectively)

Fiscal year ending June 30,	2022	2021	2020	2019	2018
Total OPEB liability					
Service cost	\$ 20,063,473	\$ 10,717,987	\$ 10,622,337	\$ 10,159,859	\$ 10,631,235
Interest on the total OPEB liability	8,918,466	10,009,065	9,953,310	10,320,288	10,463,940
Changes of benefit terms	0	0	0	0	0
Difference between expected and actual experience	92,287,051	(1,928,670)	7,774,043	(3,523,060)	(14,109,697)
Changes of assumptions	(116,381,306)	17,553,766	4,621,734	5,992,743	0
Benefit payments	(13,148,953)	(13,972,245)	(12,908,231)	(12,129,308)	(11,482,709)
Net change in total OPEB liability	(8,261,269)	22,379,903	20,063,193	10,820,522	(4,497,231)
Total OPEB liability - beginning	405,646,666	383,266,763	363,203,570	352,383,048	356,880,279
Total OPEB liability - ending (a)	\$ 397,385,397	\$ 405,646,666	\$ 383,266,763	\$ 363,203,570	\$ 352,383,048
Plan fiduciary net position					
Employer contributions	\$ 13,398,953	\$ 0	\$ 0	\$ 0	\$ 0
OPEB plan net investment income	(27,163)	0	0	0	0
Benefit payments	(13,148,953)	0	0	0	0
OPEB plan administrative expense	0	0	0	0	0
Other	0	0	0	0	0
Net change in plan fiduciary net position	222,837	0	0	0	0
Plan fiduciary net position - beginning	0	0	0	0	0
Plan fiduciary net position - ending (b)	\$ 222,837	\$ 0	\$ 0	\$ 0	\$ 0
Net OPEB liability - ending (a) - (b)	\$ 397,162,560	\$ 405,646,666	\$ 383,266,763	\$ 363,203,570	\$ 352,383,048
Plan fiduciary net position as a percentage of total OPEB liability	0.06 %	0.00 %	0.00 %	0.00 %	0.00 %
Covered-employee payroll	\$ 50,771,462	\$ 52,560,591	\$ 52,396,661	\$ 51,864,261	\$ 49,203,459
Net OPEB liability as a percentage of covered-employee payroll	782.26 %	771.77 %	731.47 %	700.30 %	716.18 %
Notes to Schedule:					
Single Discount Rate	3.69 %	2.18 %	2.66 %	2.79 %	2.98 %
Changes of assumptions reflect the effects of changes in the Single Discount Rate each period.					



SECTION E

SUMMARY OF BENEFITS

Summary of Benefits

As of June 30, 2022

Normal Retirement Benefit Eligibility

The City administers a single-employer defined benefit plan, which provides medical/drug and dental benefits for eligible retirees and their dependents through the City group health and dental insurance plans for both active and retired members. Benefit provisions are established and amended by union contract, through negotiations between the City and respective unions as well as by City Ordinance.

Medicare Supplement Benefits

Upon reaching age 65, direct city sponsored health insurance benefits end, and many retired city employees become eligible for Medicare supplement plans subsidized by the City.

Eligibility for Municipal Employees

Hired before 7/1/2015: Tier 1 employees may retire after age 55 with at least 10 years of service with full health benefits until age 65.

Hired after 7/1/2015: Employees may retire after age 55 with at least 10 years of service but at a reduced pension benefit before age 59. Eligibility for health benefits is limited to single plan coverage.

Eligibility for Uniformed (Police & Fire) Employees

Hired before 7/1/2012: Police and Fire 1 as well as Police 2, Tier 1 may retire with at least 20 years of service and are eligible for full family health benefits until age 65.

Hired after 7/1/2012: Police 2, Tier 2 Employees may retire with at least 25 years of service at age 50 for full family health benefits until age 65.

Hired after 5/29/1992 and before 7/1/2009: Fire 2, Tier 1 employees may retire with 20 years of service and are eligible for full family health benefits until age 65 with mandatory retirement at age 60.

Hired after 7/1/2009: Fire 2, Tier 2 employees may retire with at least 25 years of service and must be 50 years old for full family health benefits until age 65 with mandatory retirement at age 60.

Normal Retirement Benefits

The City contributes an amount toward the cost of retiree (and spouse if applicable) medical and dental insurance for eligible Medicare & non-Medicare retirees.

Disability Retirement Benefits

To be eligible for continuation of health care benefits, disability retirements must meet the health care benefit eligibility conditions above for normal retirement benefits.

Death-In-Service Retirement Benefits

For municipal employees, the City only provides death-in-service benefits to a surviving spouse of a depending on vesting service years and age at the time of the employee death. For police and fire employees, the City provides death-in-service health benefits to the surviving spouse.



Summary of Benefits

As of June 30, 2022

Benefits for Spouses

Eligible retirees have the option to carry a spouse on the City's health insurance policy. Spouses of deceased active employees have the option of continuing coverage on the City's health insurance policy. The City also subsidizes spousal coverage for all uniformed participants and for spouses of municipal participants hired before July 1, 2015.

Dental Coverage

Eligible Police and fire retirees and their spouses may elect to receive dental coverage through a City plan, with Police premiums for both retiree and spouse partially paid for by the City and the retiree paying the cost differential between Level 4 and Level 2 coverage. Fire retirees pay the full premium for dental coverage. Dental coverage ends and subsidized premiums cease when retiree reaches Medicare eligibility.

Non-Medicare Premiums Effective July 1, 2022

Non-Medicare premiums for Retiree-Only ranges from \$733 to \$930.

Non-Medicare premiums for Retiree + Spouse ranges from \$1,789 to \$2,276.

Dental premiums for police retirees are \$29.87 for retiree, and \$97.74 for family.

Dental premiums for fire retirees are \$27.34 for retiree and \$88.70 for family.

The classic medical plan option is no longer offered to employees.



Summary of Benefits

As of June 30, 2022

Medicare Premiums Effective January 1, 2022

Plan Coverage	Total Premium	City Amount	Retiree Amount
Muni Plan C	\$194.45	\$194.45	\$0.00
Muni Plan G	173.29	173.29	0.00
BlueChip C	270.00	194.45	75.55
BlueChip G	270.00	173.29	96.71
Fire C /w MM	613.14	613.14	0.00
Fire G /w MM	591.98	591.98	0.00
Fire C w/o MM	194.45	0.00	194.94
Fire G w/o MM	173.29	0.00	173.29
Police Plan C-rx	557.75	557.75	0.00
Police Plan G-rx	536.59	536.59	0.00

Eligible Fire retirees that retired after 7/1/2002 are reimbursed for the cost of Medicare Part B (\$164.90 as of January 1, 2023). Medicare spousal benefits are fully subsidized for uniform police and municipal participants hired before July 1, 2015. Fire retirees retiring between 7/1/1983 to 12/31/1986, and 7/1/1994 to 6/30/2002 pay the full amount of Plan C or G without major medical deducted from their pension if they should choose to enroll.

Medicare Supplement Plan C options are only available to retirees eligible for Medicare before 1/1/2020.

For Police retiring after 7/1/2003 and Fire retiring after 7/1/2002, retirees and spouses are eligible to enroll in the enhanced Medicare supplement. They must be enrolled in Medicare A and B.

SECTION F

UNDERLYING RETIREE CLAIMS COST DEVELOPMENT

Underlying Retiree Claims Cost Development

The retiree costs were estimated based on the plan premiums effective July 1, 2022, and are used for both current and future retirees. An inherent assumption in this methodology is that the projected future retirees will have a similar distribution by plan type as the current active employees and retirees. The fully-insured premiums the City pays its insurance carrier are blended rates based on the combined experience of active and retired members. Because the average cost of providing health care benefits to retirees under age 65 is higher than the average cost of providing health care benefits to active employees, there is an implicit employer subsidy for the non-Medicare eligible retirees.

Age-graded and sex-distinct per capita costs are utilized by this valuation. These costs are appropriate for the unique age and sex distribution currently existing. Over the future years covered by this valuation, the age and sex distribution will most likely change. Therefore, our process “distributes” the average rate over all age/sex combinations and assigns a unique rate for each combination. The age/sex specific costs more accurately reflect the health care utilization and cost at that age.

The monthly per capita costs including medical and prescription drug benefits at select ages are shown below:

For Those Not Eligible For Medicare		
Age	Male	Female
40	\$460.00	\$747.46
50	745.65	918.57
60	1,267.26	1,247.82
64	1,541.03	1,454.31

The underlying post-65 per capita costs are not age-adjusted. Please see section E for a summary of post-65 monthly costs.

Piotr Krekora is a Member of the American Academy of Actuaries (MAAA) and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions herein.



Piotr Krekora, ASA, EA, MAAA

SECTION G

SUMMARY OF PARTICIPANT DATA

City of Warwick
Total Active Members as of June 30, 2022
By Attained Age and Years of Service

Attained Age	Years of Service to Valuation Date							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	
Under 20	1							1
20-24	16	1						17
25-29	52	15	1					68
30-34	33	57	16					106
35-39	23	48	28	12				111
40-44	16	13	15	25	13			82
45-49	11	6	2	43	23	5		90
50-54	17	18	3	24	33	16	3	114
55-59	10	13	1	22	9	8	3	66
60-64	5	12		8	2	3		30
65 & Over	6	4	3	1	4	1	1	20
Totals	190	187	69	135	84	33	7	705

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age: 43.6 years

Service: 11.5 years

City of Warwick
Total Retired Members as of June 30, 2022
By Attained Age

Attained Age	Number of Retirees		
	Male	Female	Total
Under 55	77	15	92
55-59	116	25	141
60-64	144	48	192
65 & Over	219	169	388
Totals	556	257	813

The number counts above only include those retirees who have elected to receive retiree health care coverage through the City of Warwick Retiree Health Care Plan. Of the 813 retirees, 146 police retirees are receiving dental health care benefits, and 45 fire retirees are receiving Part B Medicare reimbursements.

SECTION H

VALUATION METHODS AND ACTUARIAL ASSUMPTIONS

Valuation Methods

Actuarial Cost Method – Normal cost and the allocation of benefit values between service rendered before and after the valuation date were determined using an **Individual Entry-Age Normal Actuarial Cost Method** having the following characteristics:

- (i) the annual normal cost for each individual active member, payable from the date of employment to the date of retirement, is sufficient to accumulate the value of the member's benefit at the time of retirement; and
- (ii) each annual normal cost is a constant percentage of the member's year by year projected covered pay.

Actuarial gains/(losses), as they occur, reduce/(increase) the Total OPEB Liability.

Actuarial Assumptions

The rate of inflation is assumed to be 2.50% per year.

The Single Discount Rate of 3.69% is based on the measurement date of June 30, 2022.

The rates of salary increase used for individual members are in accordance with the following tables.

General Employees:

Years of Service	Service-Related Component	Total Increase
1	4.00%	7.00%
2	3.00	6.00
3	2.75	5.75
4	2.50	5.50
5	2.25	5.25
6	2.00	5.00
7	1.25	4.25
8	0.75	3.75
9-10	0.50	3.50
11-15	0.25	3.25
16 or more	0.00	3.00

Firefighters & Police Officers:

Years of Service	Service-Related Component	Total Increase
1	10.00%	13.50%
2	9.00	12.50
3	7.00	10.50
4	4.00	7.50
5	2.50	6.00
6	3.00	6.50
7	0.50	4.00
8	0.50	4.00
9 or more	0.00	3.50

Actuarial Assumptions

The rates of post-retirement mortality for healthy retirees:

The gender-distinct PubG-2010 Healthy Retiree tables were used with male rates multiplied by 115% and female rates multiplied by 111%. The rates were projected on a fully generational basis using the ultimate mortality improvement rates from table MP-2016 to account for future mortality improvements.

The rates of post-retirement mortality for disabled retirees:

The gender-distinct PubG-2010 Disabled Retiree tables were used for General employees and the gender-distinct PubS-2010 Disabled Retiree tables were used for Firefighters and Police Officers with all male rates multiplied by 115% and all female rates multiplied by 111%. The rates were projected on a fully generational basis using the ultimate mortality improvement rates from table MP-2016 to account for future mortality improvements.

The rates of mortality for active members:

The gender-distinct PubG-2010 Employee tables were used for General employees and the gender-distinct PubS-2010 Employee tables were used for Firefighters and Police Officers. The rates were projected on a fully generational basis using the ultimate mortality improvement rates from table MP-2016 to account for future mortality improvements.

The rates of retirement shown in the following tables vary by age for general employees and by service for police officers and firefighters.

General Employees:

Unreduced retirement rates: a flat 25% per year retirement probability for members eligible for unreduced retirement. A 50% retirement probability at first eligibility will be applied.

Reduced retirement rates:

Age	Probability of Retirement	Age	Probability of Retirement
55	4%	61	15%
56	4%	62	30%
57	4%	63	25%
58	5%	64	25%
59	5%	65	60%
60	15%	66	80%

Actuarial Assumptions

The rates of retirement (continued)

Firefighters:

Service	Tier I	Tier II
20	12%	
21	10%	
22	10%	
23	10%	
24	12%	
25	14%	10%
26	16%	2%
27	18%	2%
28	20%	2%
29	20%	2%
30+	35%	100%

Police Officers:

Service	Tier I	Tier II
20	12%	
21	10%	
22	10%	
23	10%	
24	12%	
25	14%	15%
26	16%	5%
27	18%	5%
28	20%	5%
29	20%	5%
30	35%	33%
31	35%	5%
32	35%	5%
33	35%	5%
34	35%	5%
35+	100%	100%

Actuarial Assumptions

Rates of separation from active membership are rates of withdrawal among active members for reasons other than death or disability or retirement. Termination rates are not applied to members eligible for retirement.

General Employees:

Service	Termination Rate	Service	Termination Rate
1	0.175000	14	0.019479
2	0.118774	15	0.018263
3	0.101396	16	0.017470
4	0.086148	17	0.016956
5	0.072887	18	0.016579
6	0.061471	19	0.016198
7	0.051757	20	0.015669
8	0.043604	21	0.014851
9	0.036868	22	0.013602
10	0.031408	23	0.011778
11	0.027082	24	0.009239
12	0.023746	25	0.005841
13	0.021259		

Firefighters & Police Officers:

Service	Termination Rate	Service	Termination Rate
1	0.100000	11	0.016586
2	0.055650	12	0.014969
3	0.043890	13	0.013493
4	0.037012	14	0.012135
5	0.032131	15	0.010878
6	0.028346	16	0.009708
7	0.025253	17	0.008613
8	0.022637	18	0.007584
9	0.020372	19	0.006615
10	0.018374	20+	0.000000

Actuarial Assumptions

Rates of disability: Sample rates per 1,000 active members are shown below. Ordinary disability rates are not applied to members eligible for retirement.

General Employees:

Age	Males	Females
25	0.59	0.27
30	0.72	0.33
35	0.98	0.45
40	1.43	0.66
45	2.34	1.08
50	3.97	1.83
55	6.57	3.03
60	9.17	4.23
65	15.02	6.93

Firefighters & Police Officers:

Age	Ordinary, Males and Females	Accidental, Males and Females
25	0.26	1.36
30	0.33	1.76
35	0.44	2.32
40	0.66	3.52
45	1.08	5.76
50	1.82	9.68
55	1.82	9.68
60	1.82	9.68
65	1.82	9.68

Actuarial Assumptions

Health cost increases are displayed in the following table:

Health Care Trend Inflation Rates		
Year	Pre-65	Post-65
2023	6.75%	5.20%
2024	6.50	5.10
2025	6.25	5.00
2026	6.00	4.90
2027	5.75	4.80
2028	5.50	4.70
2029	5.25	4.60
2030	5.00	4.50
2031	4.80	4.40
2032	4.60	4.30
2033	4.40	4.20
2034	4.20	4.15
2035 & Later	4.15	4.15

The 2023 Part B Premium was known at the time of the valuation. Dental costs were assumed to increase 4% per year.

Miscellaneous and Technical Assumptions

Administrative Expenses	No explicit assumption has been made for administrative expenses.
Claims Utilization	To model the impact of aging on the underlying health care costs, the valuation relied on the Society of Actuaries' 2013 Study "Health Care Costs – From Birth to Death". Chart 1 (2010 Aggregate Commercial Costs) was used to model the impact of aging for ages less than 65.
Decrement Timing	Decrements of all types are assumed to occur mid-year.
Decrement Operation	Disability does not operate during retirement eligibility.
Eligibility Testing	Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.
Marriage Assumption	100% of males and 100% of females are assumed to be married at time of decrement. Male spouses are assumed to be three years older than female spouses for active member valuation purposes.
Medicare Coverage	Assumed to be available for all covered employees on attainment of age 65. Disabled retirees were assumed to be eligible for Medicare coverage at age 65.
Election Percentage	It was assumed that 100% of future retirees would choose to receive retiree health care benefits through the City. Also, it was assumed that 100% of fire retirees would choose Medicare Part B reimbursements through the City and 100% of police retirees would choose to receive dental benefits through the City. Of those assumed to elect coverage, 85% of males and 50% of females were assumed to elect two-person coverage, if eligible. For General employees hired after July 1, 2015, there was a 75% reduction on the assumed probability of electing spousal coverage. For those that elect two-person coverage, it was assumed that coverage would continue to the spouse upon death of the retiree, if eligible.
Demographic Assumptions	This report has used the same demographic assumptions used to value the defined benefit retirement plans in which the members participate. We are reliant upon the retirement plan actuary to develop the demographic assumptions. Based on our experience, the assumptions appear reasonable.

Assumption, Method, and Plan Changes

Assumption, Method, and Plan Changes

1. The Single Discount Rate increased from 2.18% as of June 30, 2021 to 3.69% as of June 30, 2022. This change decreased the total OPEB liability.

Due to the limited scope of the transition, the following assumption and method changes were included in the difference between expected and actual experience:

2. The percentage of covered male retirees who also cover their spouse was increased from 70% to 85%. This change increased the Total OPEB Liability.
3. The trend rates were updated to reflect the Plan's anticipated experience.

SECTION I

GLOSSARY OF TERMS

Glossary of Terms

Accrued Service	Service credited under the system that was rendered before the date of the actuarial valuation.
Actuarial Accrued Liability (AAL)	The AAL is the difference between the actuarial present value of all benefits and the actuarial value of future normal costs. The definition comes from the fundamental equation of funding which states that the present value of all benefits is the sum of the Actuarial Accrued Liability and the present value of future normal costs. The AAL may also be referred to as "accrued liability" or "actuarial liability."
Actuarial Assumptions	These assumptions are estimates of future experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and compensation increases. Actuarial assumptions are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (compensation increases, payroll growth, inflation and investment return) consist of an underlying real rate of return plus an assumption for a long-term average rate of inflation.
Actuarial Cost Method	A mathematical budgeting procedure for allocating the dollar amount of the actuarial present value of the OPEB trust benefits between future normal cost and actuarial accrued liability. The actuarial cost method may also be referred to as the actuarial funding method.
Actuarial Equivalent	A single amount or series of amounts of equal actuarial value to another single amount or series of amounts, computed on the basis of appropriate actuarial assumptions.
Actuarial Gain (Loss)	The difference in liabilities between actual experience and expected experience during the period between two actuarial valuations is the gain (loss) on the accrued liabilities.
Actuarial Present Value (APV)	The amount of funds currently required to provide a payment or series of payments in the future. The present value is determined by discounting future payments at predetermined rates of interest and probabilities of payment.
Actuarial Valuation	The actuarial valuation report determines, as of the actuarial valuation date, the service cost, total OPEB liability, and related actuarial present value of projected benefit payments for OPEB.
Actuarial Valuation Date	The date as of which an actuarial valuation is performed.

Glossary of Terms

Actuarially Determined Contribution (ADC) or Annual Required Contribution (ARC)	A calculated contribution into an OPEB plan for the reporting period, most often determined based on the funding policy of the plan. Typically, the Actuarially Determined Contribution has a normal cost payment and an amortization payment.
Amortization Method	The method used to determine the periodic amortization payment may be a level dollar amount, or a level percent of pay amount. The period will typically be expressed in years, and the method will either be “open” (meaning, reset each year) or “closed” (the number of years remaining will decline each year).
Amortization Payment	The amortization payment is the periodic payment required to pay off an interest-discounted amount with payments of interest and principal.
Cost-of-Living Adjustments	Postemployment benefit changes intended to adjust benefit payments for the effects of inflation.
Cost-Sharing Multiple-Employer Defined Benefit OPEB Plan (cost-sharing OPEB plan)	A multiple-employer defined benefit OPEB plan in which the OPEB obligations to the employees of more than one employer are pooled and OPEB plan assets can be used to pay the benefits of the employees of any employer that provides benefits through the OPEB plan.
Covered-Employee Payroll	The payroll of employees that are provided with benefits through the OPEB plan.
Deferred Inflows and Outflows	The deferred inflows and outflows of OPEB resources are amounts used under GASB Statement No. 75 in developing the annual OPEB expense. Deferred inflows and outflows arise with differences between expected and actual experiences; changes of assumptions. The portion of these amounts not included in the OPEB expense should be included in the deferred inflows or outflows of resources.
Discount Rate	<p>For GASB purposes, the discount rate is the single rate of return that results in the present value of all projected benefit payments to be equal to the sum of the funded and unfunded projected benefit payments, specifically:</p> <ol style="list-style-type: none">1. The benefit payments to be made while the OPEB plans’ fiduciary net position is projected to be greater than the benefit payments that are projected to be made in the period; and2. The present value of the benefit payments not in (1) above, discounted using the municipal bond rate.

Glossary of Terms

Entry Age Actuarial Cost Method (EAN)

The EAN is a cost method for allocating the costs of the plan between the normal cost and the accrued liability. The actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis (either level dollar or level percent of pay) over the earnings or service of the individual between entry age and assumed exit ages(s). The portion of the actuarial present value allocated to a valuation year is the normal cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future normal costs is the actuarial accrued liability. The sum of the accrued liability plus the present value of all future normal costs is the present value of all benefits.

Fiduciary Net Position

The fiduciary net position is the market value of the assets of the trust dedicated to the defined benefit provisions.

GASB

The Governmental Accounting Standards Board is an organization that exists in order to promulgate accounting standards for governmental entities.

Long-Term Expected Rate of Return

The long-term rate of return is the expected return to be earned over the entire trust portfolio based on the asset allocation of the portfolio.

Money-Weighted Rate of Return

The money-weighted rate of return is a method of calculating the returns that adjusts for the changing amounts actually invested. For purposes of GASB Statement No. 74, the money-weighted rate of return is calculated as the internal rate of return on OPEB plan investments, net of OPEB plan investment expense.

Multiple-Employer Defined Benefit OPEB Plan

A multiple-employer plan is a defined benefit OPEB plan that is used to provide OPEB payments to the employees of more than one employer.

Municipal Bond Rate

The Municipal Bond Rate is the discount rate to be used for those benefit payments that occur after the assets of the trust have been depleted.

Net OPEB Liability (NOL)

The NOL is the liability of employers and non-employer contributing entities to plan members for benefits provided through a defined benefit OPEB plan.

Non-Employer Contributing Entities

Non-employer contributing entities are entities that make contributions to an OPEB plan that is used to provide OPEB payments to the employees of other entities. For purposes of the GASB accounting statements, plan members are not considered non-employer contributing entities.

Glossary of Terms

Normal Cost	The portion of the actuarial present value allocated to a valuation year is called the normal cost. For purposes of application to the requirements of this Statement, the term normal cost is the equivalent of service cost.
Other Postemployment Benefits (OPEB)	All postemployment benefits other than retirement income (such as death benefits, life insurance, disability, and long-term care) that are provided separately from a pension plan, as well as postemployment healthcare benefits regardless of the manner in which they are provided. Other post-employment benefits do not include termination benefits.
Real Rate of Return	The real rate of return is the rate of return on an investment after adjustment to eliminate inflation.
Service Cost	The service cost is the portion of the actuarial present value of projected benefit payments that is attributed to a valuation year.
Total OPEB Expense	<p>The total OPEB expense is the sum of the following items that are recognized at the end of the employer's fiscal year:</p> <ol style="list-style-type: none">1. Service Cost2. Interest on the Total OPEB Liability3. Current-Period Benefit Changes4. Employee Contributions (made negative for addition here)5. Projected Earnings on Plan Investments (made negative for addition here)6. OPEB Plan Administrative Expense7. Other Changes in Plan Fiduciary Net Position8. Recognition of Outflow (Inflow) of Resources due to Liabilities9. Recognition of Outflow (Inflow) of Resources due to Assets
Total OPEB Liability (TOL)	The TOL is the portion of the actuarial present value of projected benefit payments that is attributed to past periods of member service.
Unfunded Actuarial Accrued Liability (UAAL)	The UAAL is the difference between actuarial accrued liability and valuation assets.
Valuation Assets	The valuation assets are the assets used in determining the unfunded liability of the plan. For purposes of GASB Statements No. 74 and No. 75, the valuation assets are equal to the market value of assets.